

AMENDMENTS TO THE CLAIMS

Please amend the claims as follows:

Listing of Claims:

Claims 1-17 (Cancelled).

Claim 18 (Previously Presented): An optical signal receiving equipment, comprising:
an optical-electrical converting means for converting received optical signals into electronic signals;
a plurality of variable-threshold deciders configured to transform the electronic signals into a plurality of first binary signals;
a soft decision-identification means for computing identification signals based on results of transformation by the plurality of variable-threshold deciders, and for computing reliability information indicating a level of reliability of the identification signals;
an error correction means for correcting an error in the identification signals by using the reliability information computed by the soft decision-identification means;
a fixed-threshold decider configured to execute hard-decision identification of the electronic signals, independently from the soft decision-identification means and the plurality of variable-threshold deciders; and
a control means for executing the hard decision-identification of the electronic signals by using the fixed-threshold decider, for measuring an average amplitude of the electronic signals based on the hard decision-identification results, and for correcting a plurality of thresholds in the plurality of variable-threshold deciders based on a variation of the measured average amplitude over a time period.